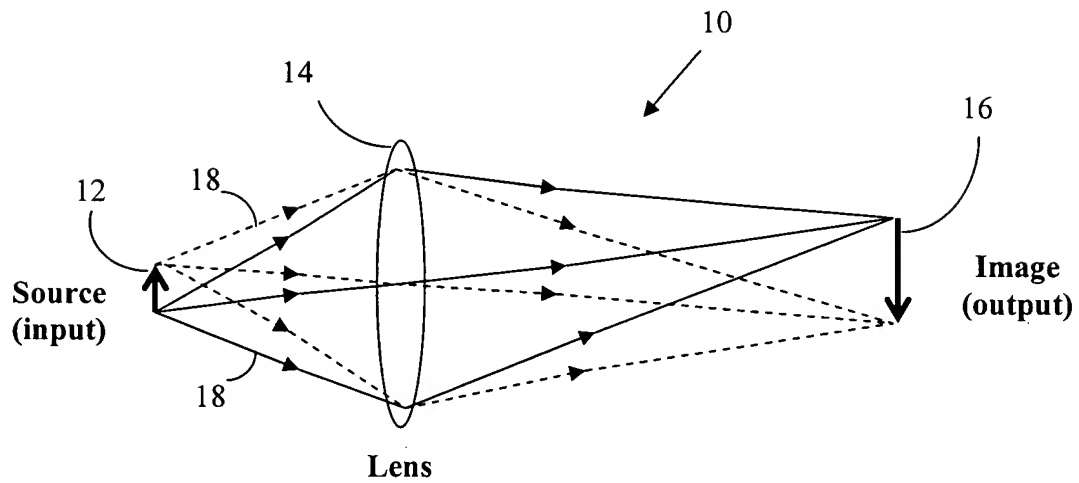
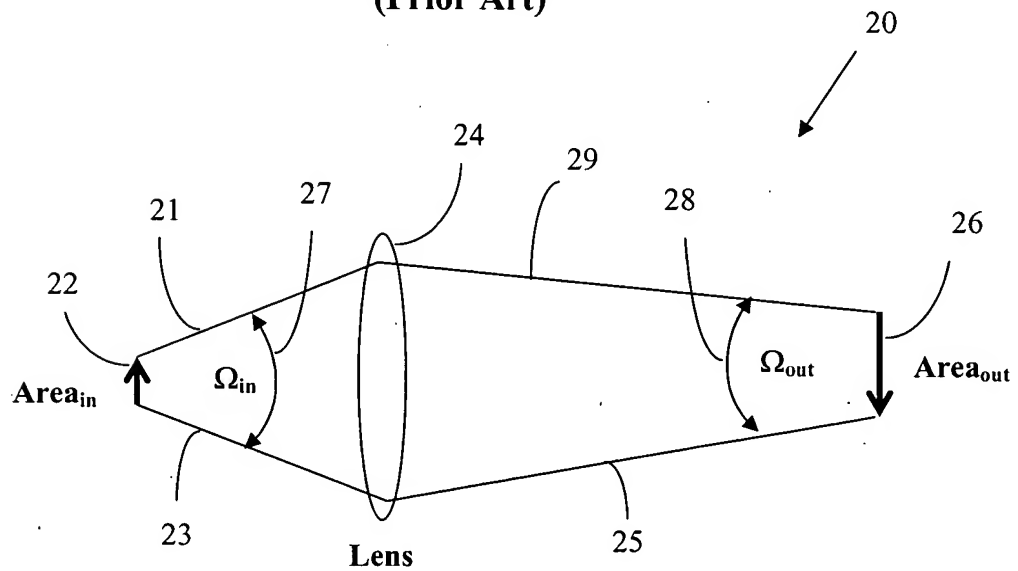


ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

**FIG. 1A**  
**(Prior Art)**

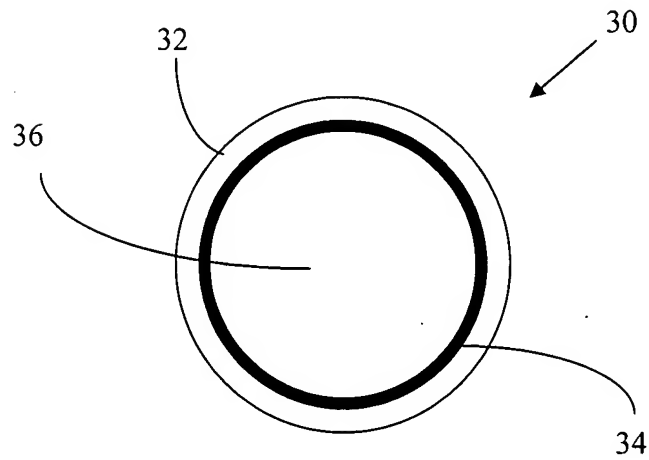


**FIG. 1B**  
**(Prior Art)**

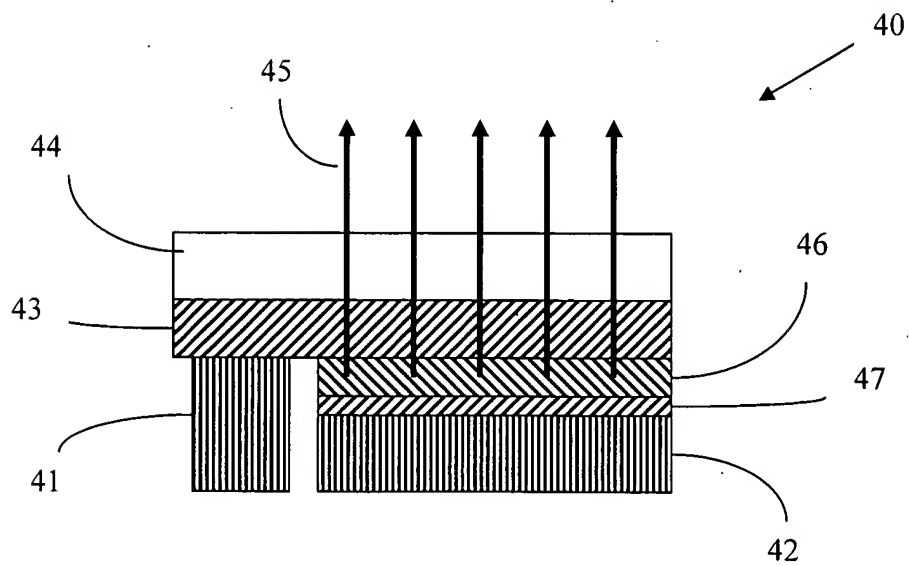


ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES.  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

**FIG. 2A**  
**(Prior Art)**



**FIG. 2B**  
**(Prior Art)**



ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 3A

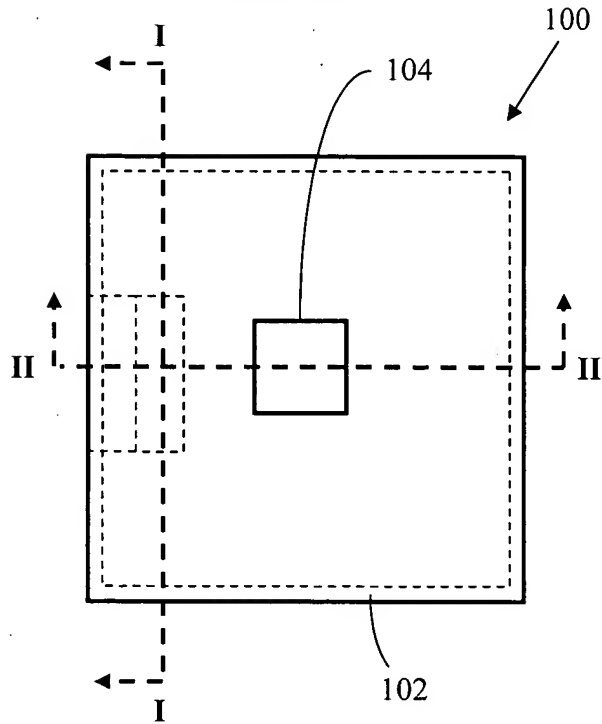


FIG. 3B

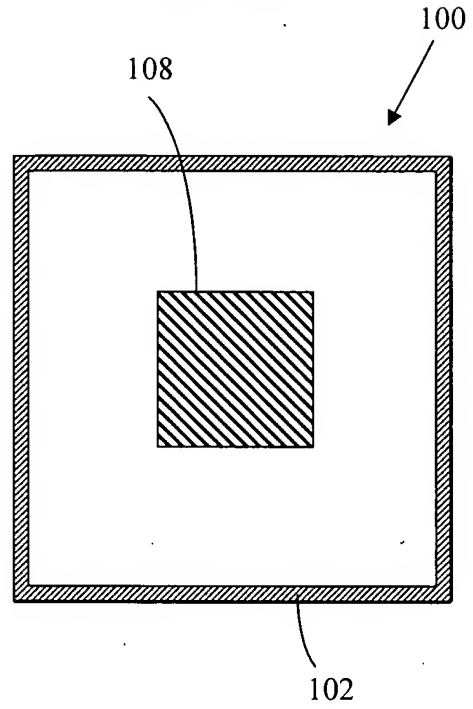
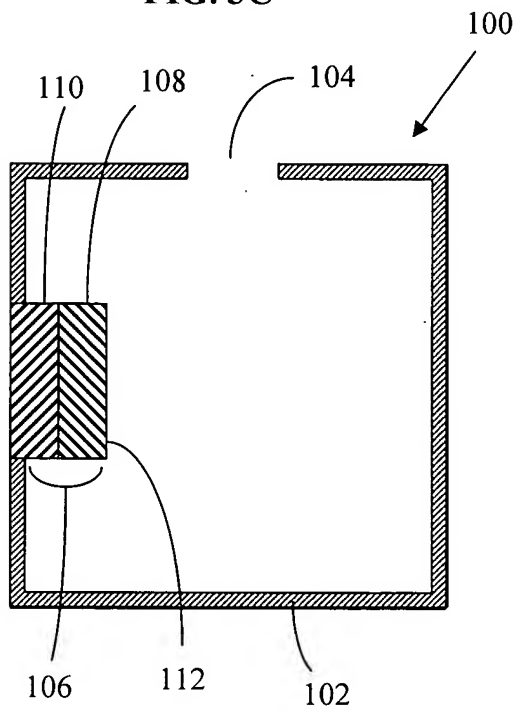
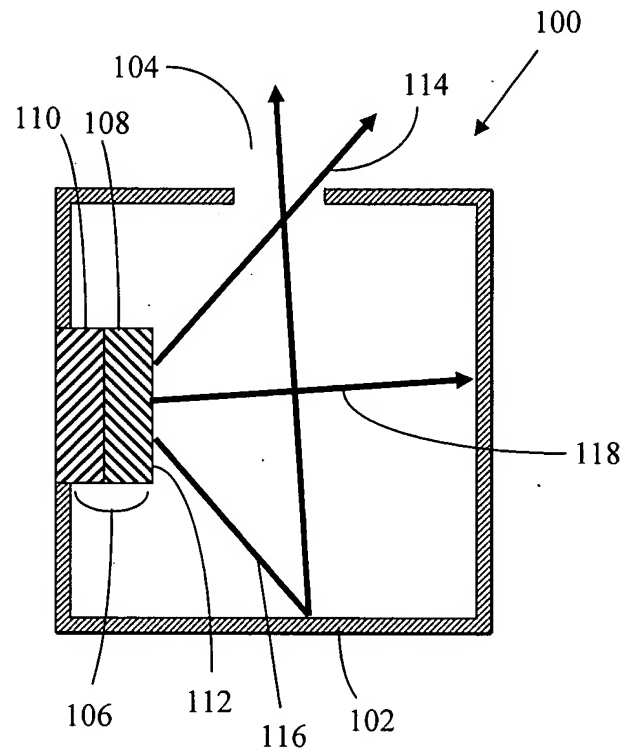


FIG. 3C

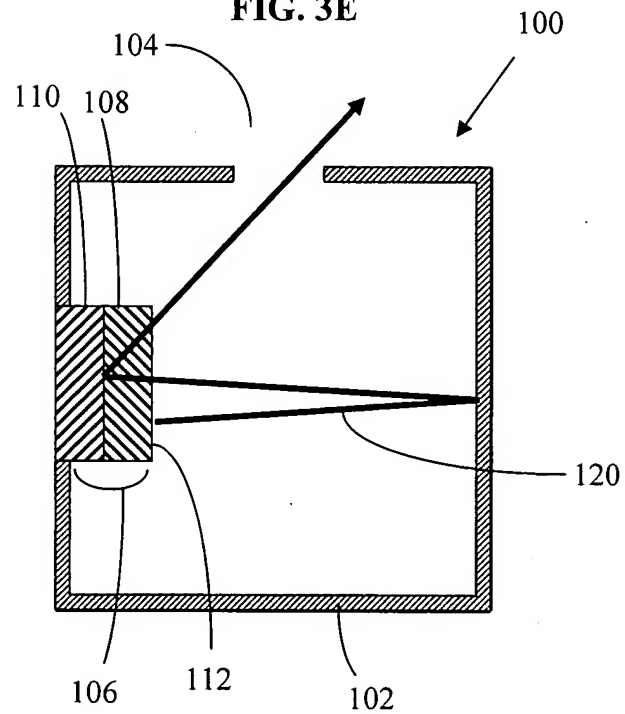


ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

**FIG. 3D**

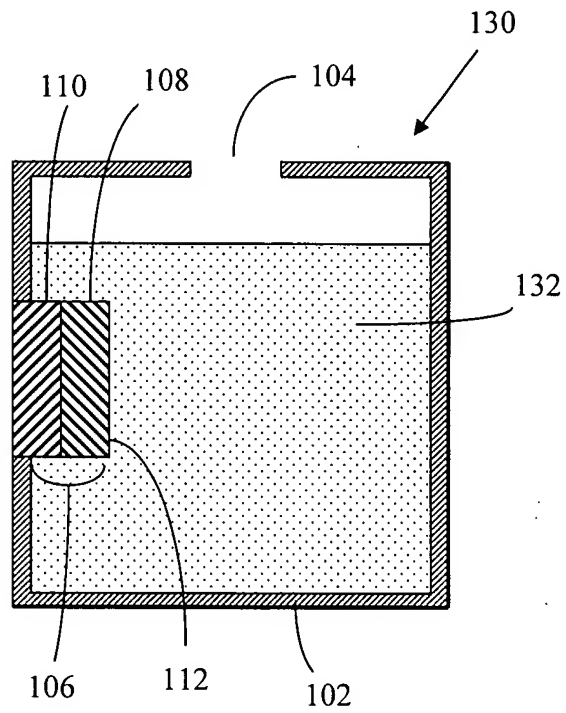


**FIG. 3E**



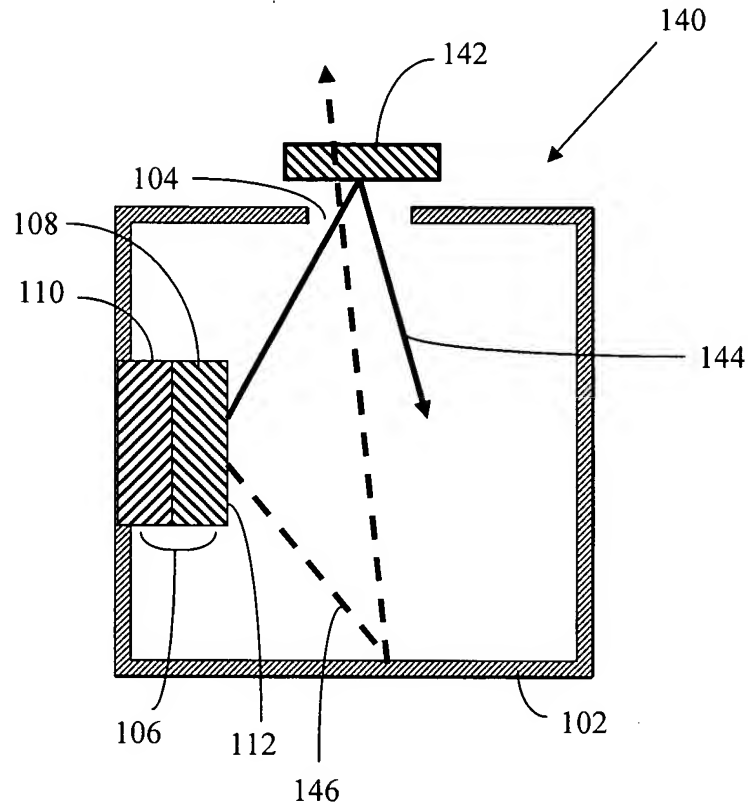
ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

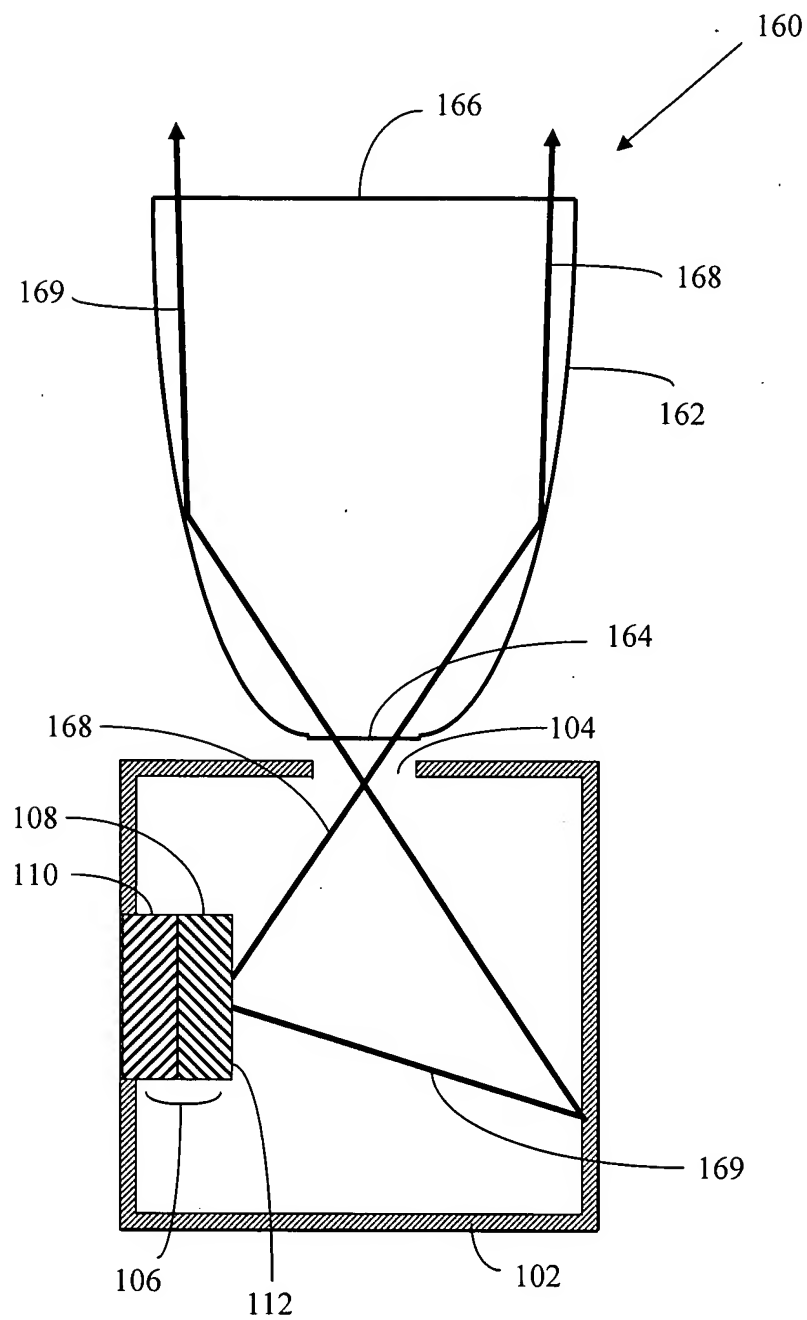
**FIG. 4**

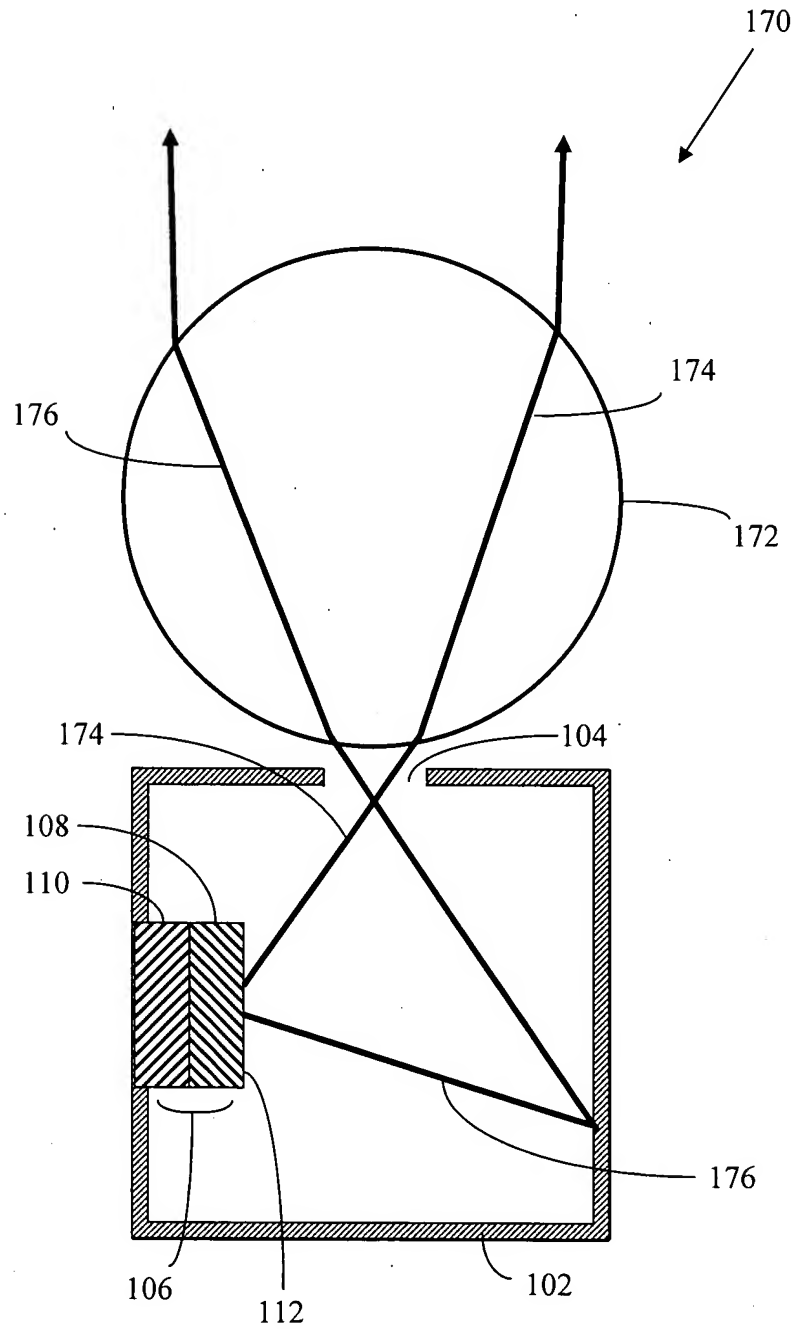


ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 5



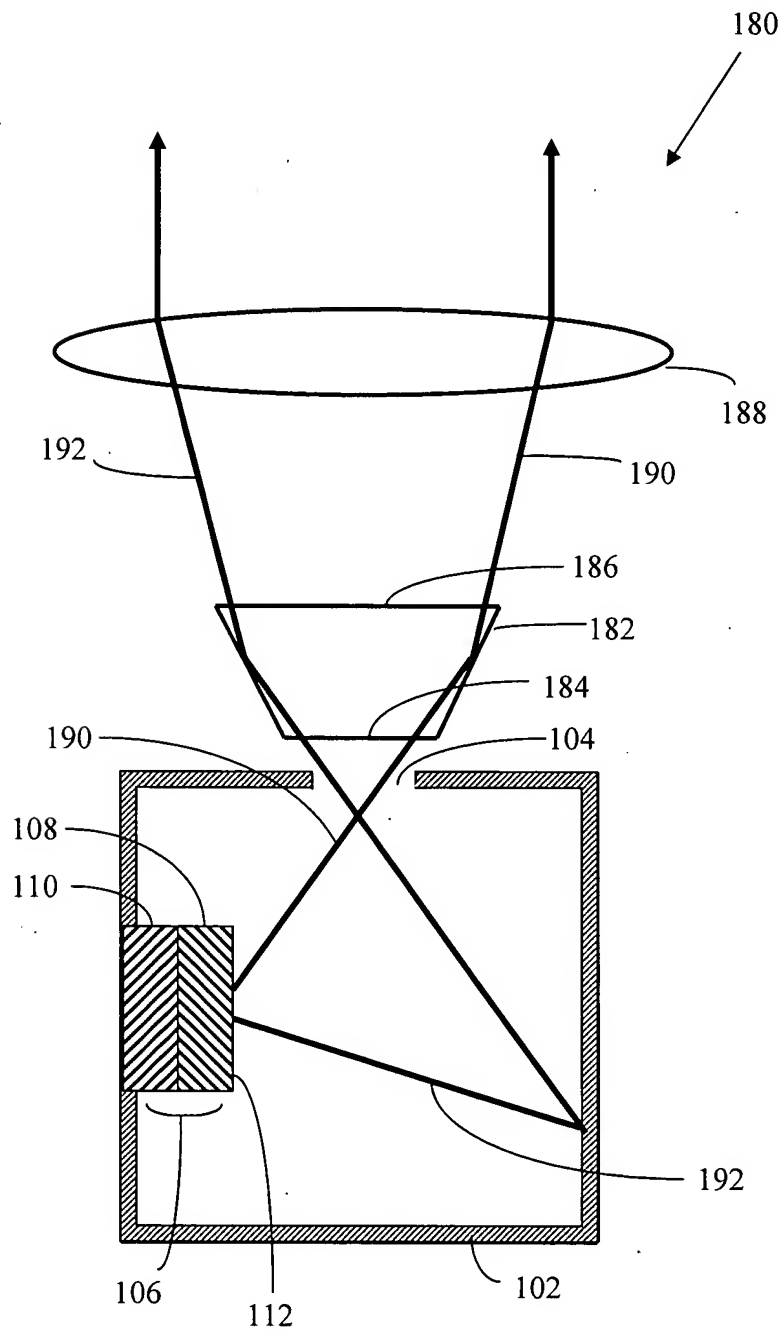






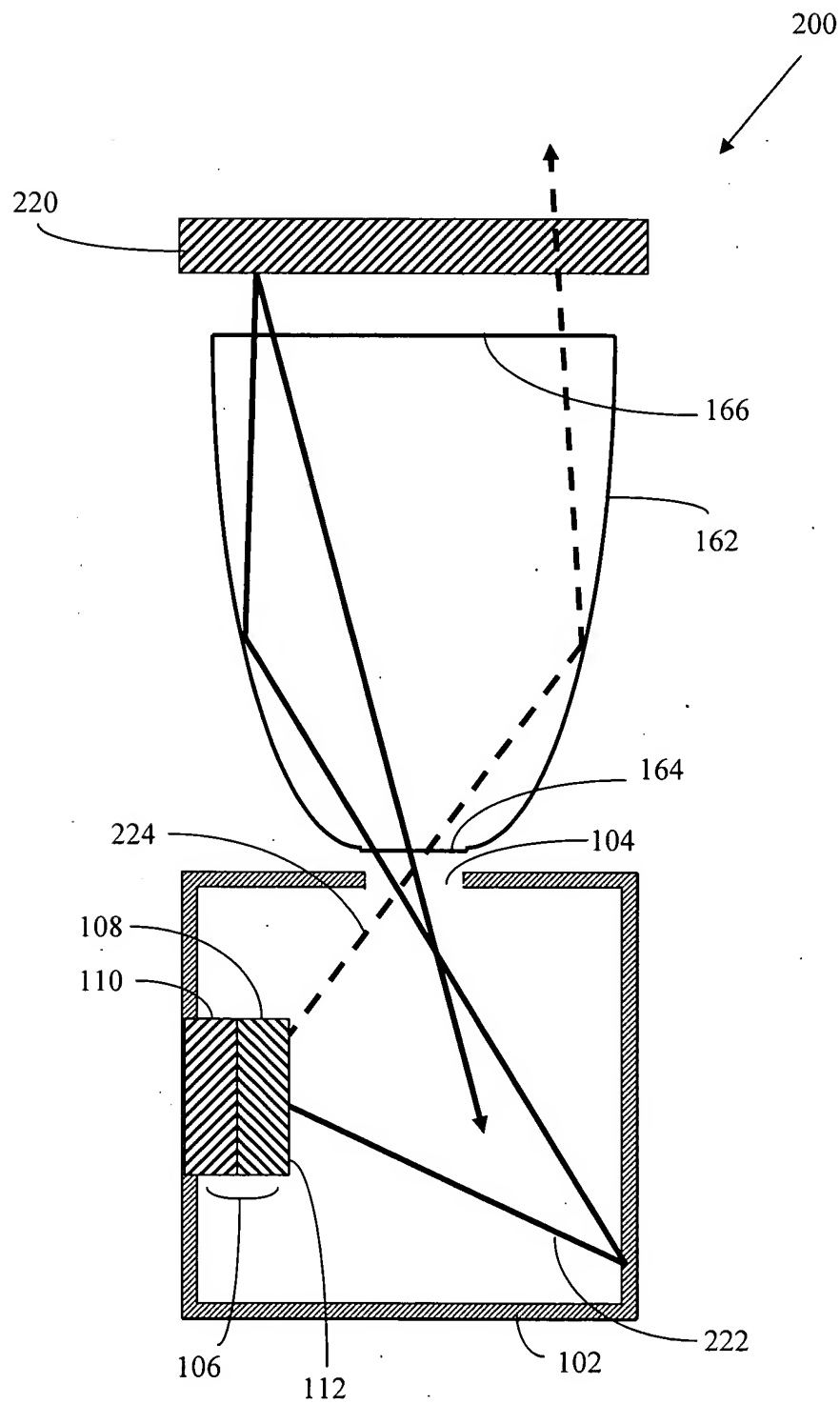
ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 6C



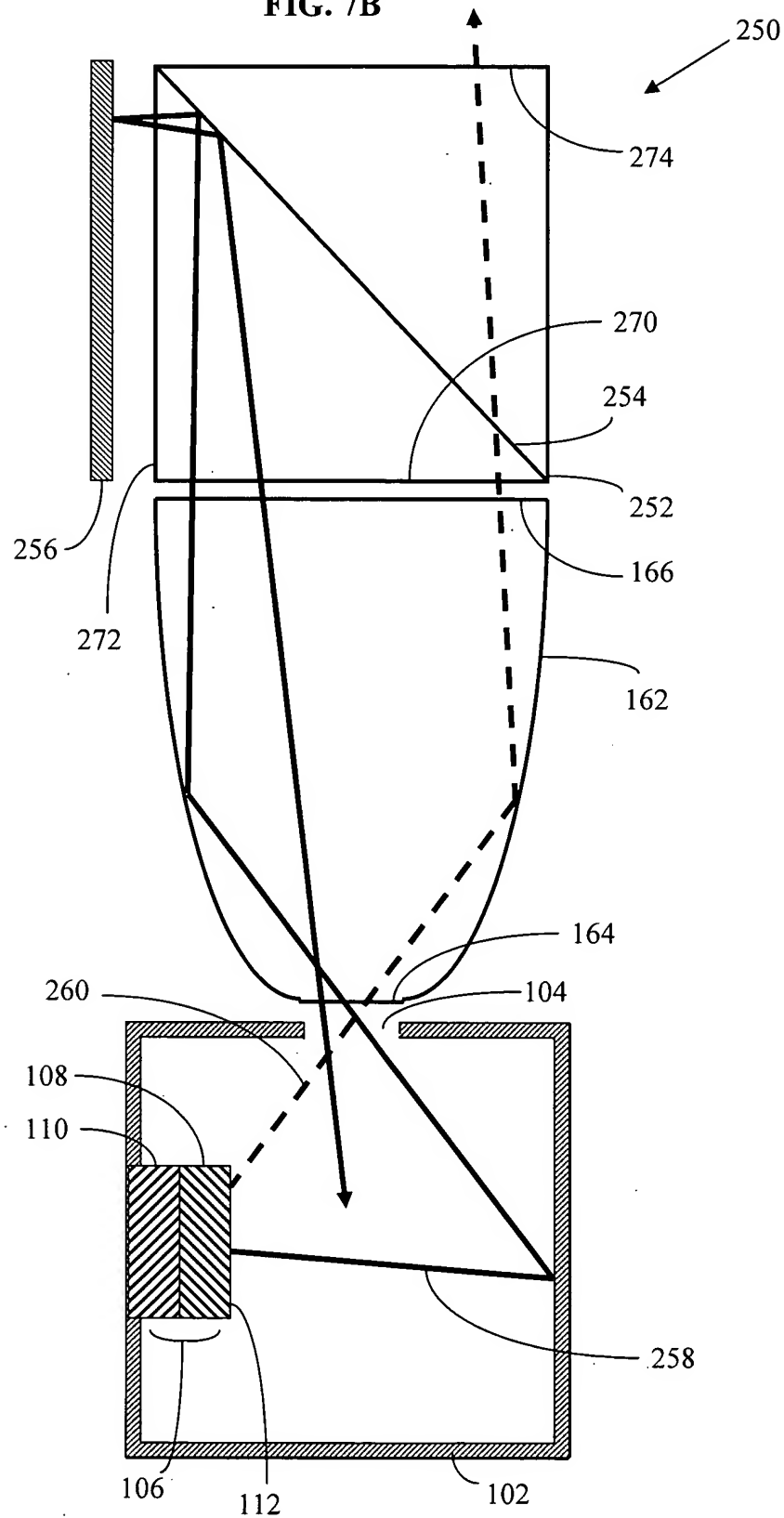
ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 7A



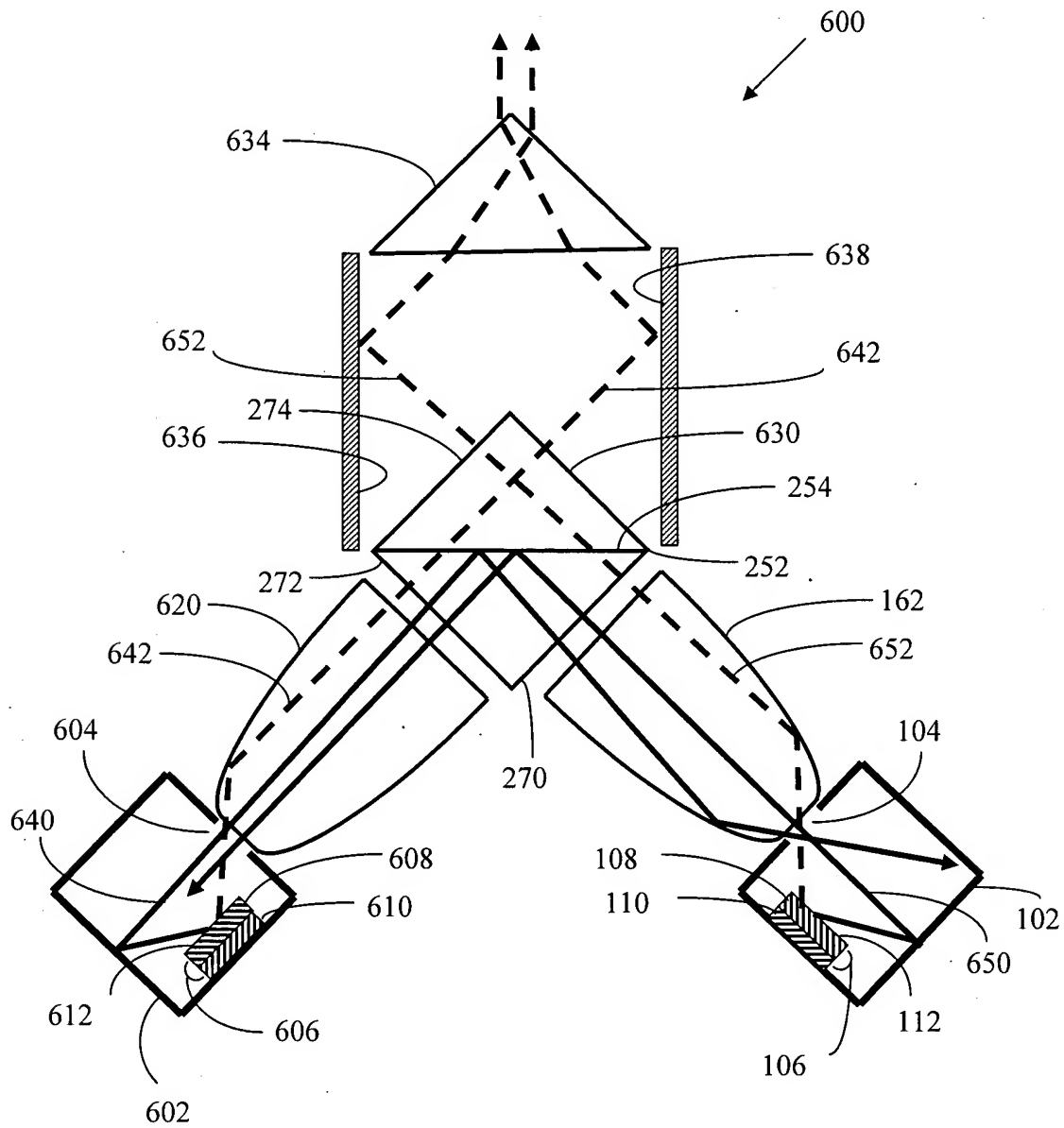
ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 7B



ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 8



ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 9A

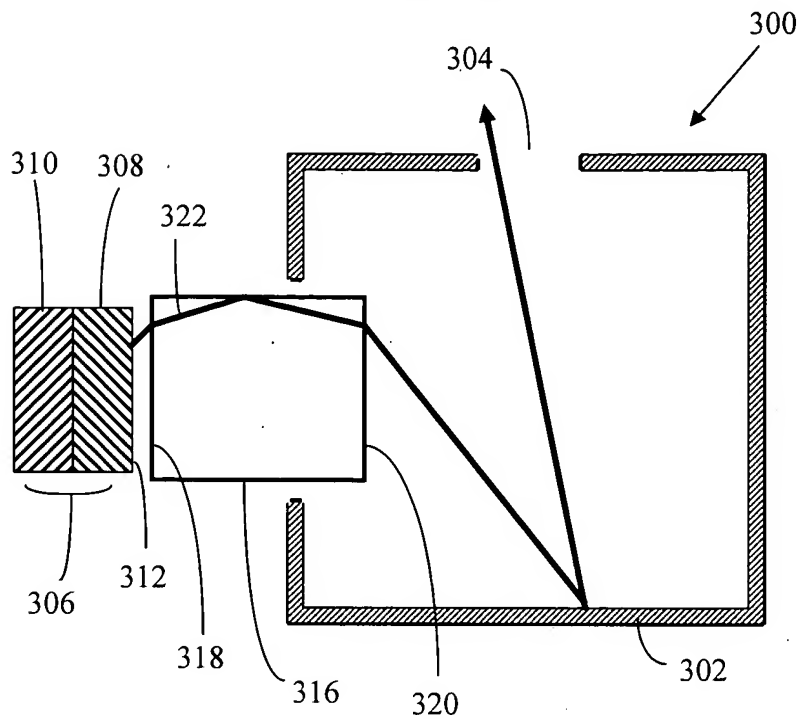
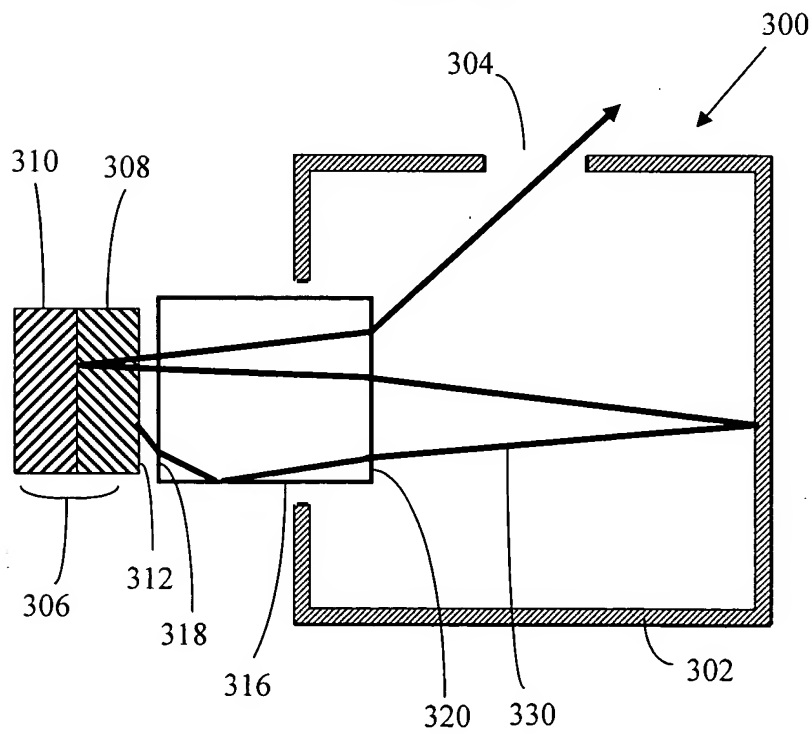


FIG. 9B



ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 10A

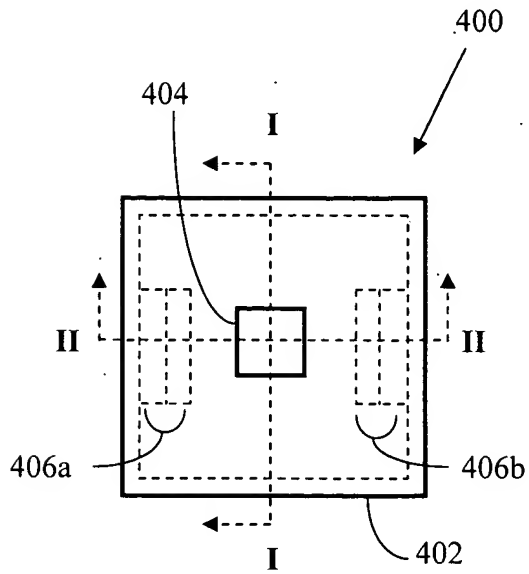


FIG. 10B

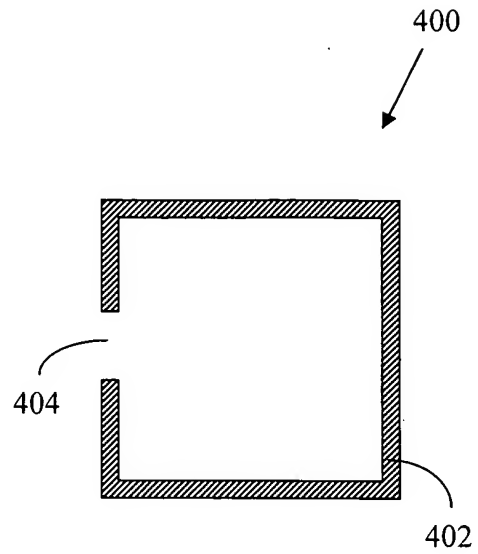
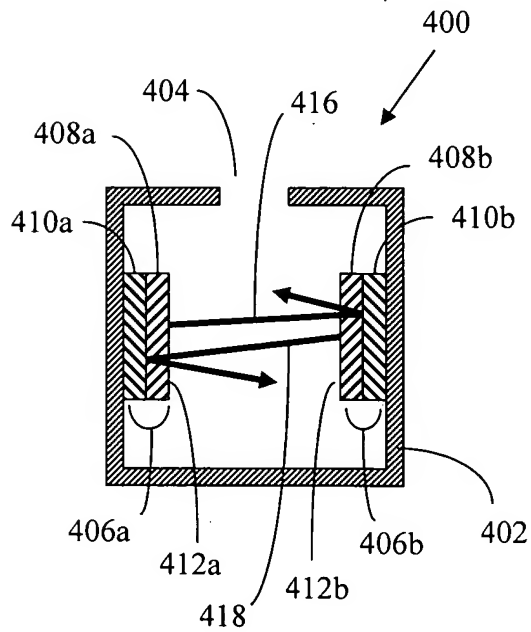


FIG. 10C



ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 11A

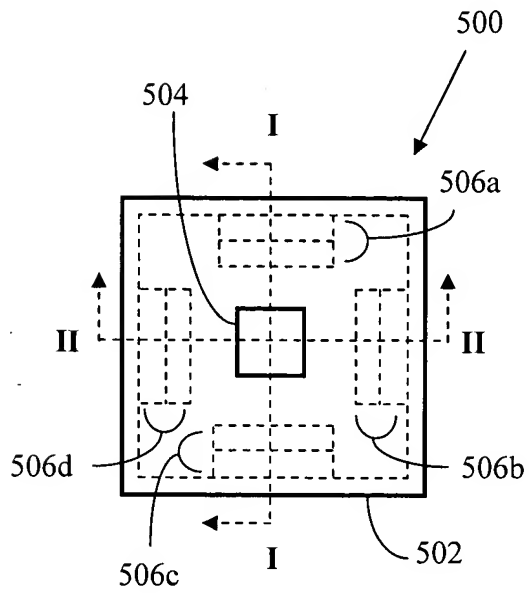


FIG. 11B

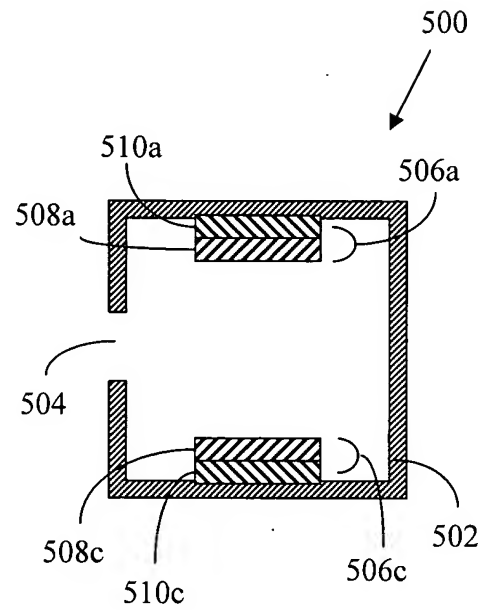
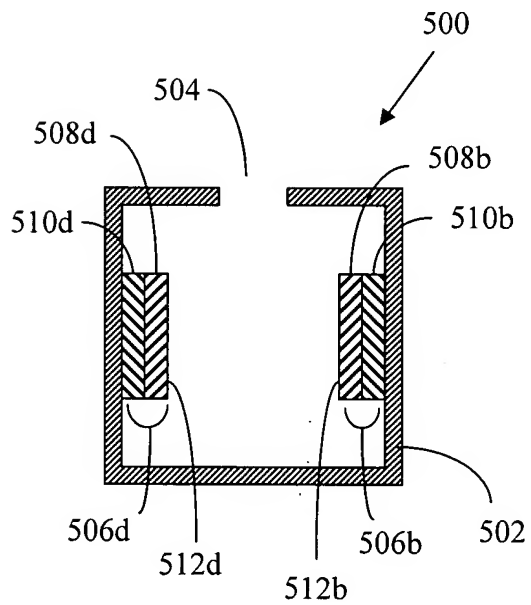


FIG. 11C



ILLUMINATION SYSTEMS UTILIZING LIGHT EMITTING DIODES  
AND LIGHT RECYCLING TO ENHANCE OUTPUT RADIANCE  
ZIMMERMAN AND BEESON

FIG. 12A

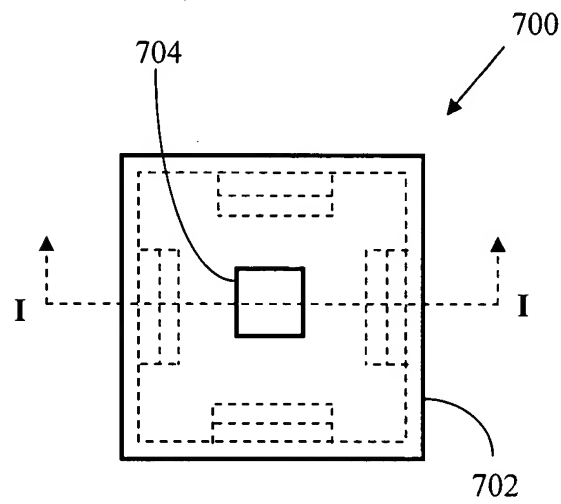


FIG. 12B

